10. On a small Collection of Butterflies sent by Lieut.-Col. A. S. G. Jayakar, A.M.S., from Muscat. By Arthur G. Butler, Ph.D., F.L.S., F.Z.S., &c.

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For some years past the collections in the British Museum have been enriched through the zeal of our Corresponding Member, Dr. Jayakar; but, until the arrival of the last consignment, no Lepidoptera have come to hand: in this one, however, several small packets were included, amongst which were examples of nineteen species of Butterflies.

As our knowledge of the fauna of Arabia is still far from complete, it seems worth while to publish a list of the Butterflies now sent.

Of the nineteen species of which examples were obtained by Dr. Jayakar, six have a wide range both in Asia and Africa, three extend from Arabia through Persia to N.W. India, one is a widely distributed Asiatic form, one occurs in Asia Minor, and eight are common to Arabia and Africa, several of these ranging through East Africa to the Cape.

Nymphalidæ.

1. Limnas chrysippus.

Papilio chrysippus, Linnæus, Mus. Lud. Ulr. p. 263 (1764).

Both sexes were obtained.

2. Ypthima asterope.

Hipparchia asterope, Klug, Symb. Phys. pl. xxix. figs. 11–14 (1832).

A female and four males.

This butterfly would seem to be common throughout Arabia wherever insect-life is possible; it also occurs in N.E. Africa.

3. Hypolimnas misippus.

Papilio misippus, Linnæus, Mus. Lud. Ulr. p. 264 (1764).

A series of worn specimens in both sexes.

The extensive range of this butterfly is well known.

4. Junonia swinhoei.

Junonia swinhoei, Butler, Ann. & Mag. Nat. Hist. ser. 5, vol. xvi. p. 309 (1885).

Two worn females.

These examples are referable rather to the Indian species than to *J. here* (found at Aden).

Lycænidæ.

5. Catochrysops contracta.

Lampides contracta, Butler, P. Z. S. 1880, p. 406, pl. xxxix. fig. 3.

Three males of this Indian species which I originally described

from examples obtained at Candahar; it appears to have a wide range.

6. Tarucus theophrastus.

Hesperia theophrastus, Fabricius, Ent. Syst. 3. i. p. 281 (1793).

A fair series, but in poor condition.

This again is a wide-ranging species.

7. Lycænesthes amarah.

Polyommatus amarah, Lefebvre, Voy. Abyss. vi. p. 384, pl. xi. figs. 5, 6 (1847).

A rather small and worn pair.

8. Zizera gaika.

Lycæna gaika, Trimen, Trans. Ent. Soc. ser. 3, vol. i. p. 403 (1862).

Seven rather worn examples.

This is a common and widely distributed African and Arabian insect.

9. Plebeius trochilus.

Lycæna trochilus, Freyer, Neuere Beitr. v. pl. 440. fig. 1 (1844).

Three examples.

10. Virachola antalus.

Dipsas antalus, Hopffer, Monatsb. k. Akad. Wiss. Berlin, 1855, p. 641.

Sithon antalus, Hopffer in Peters' Reise n. Mossamb., Ins. p. 400, pl. xxv. figs. 7–9 (1862).

♀, slightly broken; very deep in colour.

This species is common over a considerable part of Africa, Madagascar, and the Island of Johanna; it varies somewhat on both surfaces as regards the depth of colour above and definition of the markings below.

Papilionidæ.

11. Teracolus calais, var. dynamene.

Pontia dynamene, Klug, Symb. Phys. pl. vi. figs. 15, 16 (1829).

One worn male.

12. Teracolus phisadia.

Pieris phisadia, Godart, Enc. Méth. ix. p. 132 (1819).

Three males, two of them much shattered.

An interesting fact respecting this species is that, whereas all the Arabian males show a wet phase of under-surface and the Arabian females a dry phase, the same species from Northern Africa sometimes shows a dry phase in the male; I have not seen enough African examples to enable me to say whether a wet phase of female ever occurs.

13. Teracolus liagore.

Pontia liagore, Klug, Symb. Phys. pl. vi. figs. 5–8 (1829).

Three males and a female.

These examples, and especially the female, were of considerable interest to me, for they prove conclusively that in my recent revision of the genus *Teracolus* I was incorrect in referring *T. liagore* (as a seasonal phase) to *T. evarne*. I never felt quite satisfied that I was correct in so doing, as the form and pure white colouring of *T. liagore* looked out of place among the more rounded yellow-washed wings of the various seasonal phases of *T. evarne*. Now that the female and three somewhat varying males have come to hand, I am quite satisfied that *T. liagore* is merely a dry phase of the N. African *T. daira* and grades completely into *T. nouna*. It is odd that a related yet distinct species should occur at Aden.

14. Teracolus eupompe, var. dedecora.

Anthopsyche dedecora, Felder, Reise der Nov., Lep. ii. p. 184 (1865).

A slightly worn female.

Here again we have a North African type.

15. Catopsilia florella, var. pyrene.

Colias pyrene, Swainson, Zool. Ill. 1st ser. pl. 51 (1820–1).

Several worn examples.

It is probable that, as at Aden, the various forms of this species occur together, but only the variety *pyrene* appears in the present consignment.

16. Synchloe iranica.

Pieris iranica, Bienert, Lep. Ergebn. p. 27 (1870).

A fair series.

It is interesting to receive this Persian insect from Muscat, and to know that the nearly related *S. glauconome* is common to Aden and East Africa.

17. Belenois mesentina.

Papilio mesentina, Cramer, Pap. Exot. iii. pl. cclxx. A, B (1782).

Four examples (wet phase).

18. Papilio demoleus.

Papilio demoleus, Linneus, Mus. Lud. Ulr. p. 214 (1764).

Several examples of this Indian species [1].

19. Parnara mathias.

Hesperia mathias, Fabricius, Ent. Syst. Suppl. p. 433 (1798).

Two worn males of this Indo-African species.

[1] The Hon. W. Rothschild has shown that the true *P. demoleus* is not, as formerly supposed, the African species.